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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/942,016	08/29/2001	Wasim H. Chaudhuri	29250-002156/US/01	8997

30594 7590 09/12/2005

HARNESSE, DICKEY & PIERCE, P.L.C.
P.O. BOX 8910
RESTON, VA 20195

EXAMINER

BULLOCK JR, LEWIS ALEXANDER

ART UNIT PAPER NUMBER

2195

DATE MAILED: 09/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/942,016

Applicant(s)

CHAUDHURI ET AL.

Examiner

Lewis A. Bullock, Jr.

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 July 2005.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-20 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 28 January 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

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DETAILED ACTION

Claim Rejections - 35 USC § 101

1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-20 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

M.P.E.P. 2106 states:

Both types of "descriptive material" are nonstatutory when claimed as descriptive material *per se*. *Warmerdam*, 33 F.3d at 1360, 31 USPQ2d at 1759. When functional descriptive material is recorded on some computer-readable medium it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized. Compare *In re Lowry*, 32 F.3d 1579, 1583-84, 32 USPQ2d 1031, 1035 (Fed. Cir. 1994) (claim to data structure stored on a computer readable medium that increases computer efficiency held statutory) and *Warmerdam*, 33 F.3d at 1360-61, 31 USPQ2d at 1759 (claim to computer having a specific data structure stored in memory held statutory product-by-process claim) with *Warmerdam*, 33 F.3d at 1361, 31 USPQ2d at 1760 (claim to a data structure *per se* held nonstatutory). When nonfunctional descriptive material is recorded on some computer-readable medium, it is not statutory since no requisite functionality is present to satisfy the practical application requirement. Merely claiming nonfunctional descriptive material stored in a computer-readable medium does not make it statutory. Such a result would exalt form over substance. *In re Sarkar*, 588 F.2d 1330, 1333, 200 USPQ 132, 137 (CCPA 1978) ("[E]ach invention must be evaluated as claimed; yet semantogenic considerations preclude a determination based solely on words appearing in the claims. In the final analysis under 101, the claimed invention, as a whole, must be evaluated for what it is.") (quoted with approval in *Abele*, 684 F.2d at 907, 214 USPQ at 687). See also *In re Johnson*, 589 F.2d 1070, 1077, 200 USPQ 199, 206 (CCPA 1978) ("form of the claim is often an exercise in drafting"). Thus, nonstatutory music is not a computer component and it does not become statutory by merely recording it on a compact disk. Protection for this type of work is provided under the copyright law.

Data structures not claimed as embodied in computer-readable media are descriptive material *per se* and are not statutory because they are not capable of causing functional change in the computer. See, e.g., *Warmerdam*, 33 F.3d at 1361, 31 USPQ2d at 1760 (claim to a data structure *per se* held nonstatutory). Such claimed data structures do not define any structural and functional interrelationships between the data structure and other claimed aspects of the invention which permit the data structure's functionality to be realized. In contrast, a claimed computer-readable medium encoded with a data structure defines structural and functional interrelationships between the data structure and the computer software and hardware components which permit the data structure's functionality to be realized, and is thus statutory.

Based on the above recitation, claims 1-13 are a data structure not embodied in a computer-readable media and is not capable of causing functional change in the computer. Therefore, the claims are non-statutory. Claims 14-20 are computer readable medium claims wherein no requisite functionality is present to satisfy the practical application requirement. Therefore, the cited claims are non-statutory.

Applicant argues that the claims are statutory because the architecture is for providing network management of a telecommunications network. In response, the limitation Applicant is referring to is a desired goal of the architecture and the claim makes no reference to any cited functionality that achieves the desired goal. This limitation has no patentable weight because there is no statutory functionality or structure within the claim that details how the providing is achieved. The claims at best detail an overall software data structure that contains various other data structures without any functionality. The examiner has reviewed the specification in detail and has found functionality language in the specification separate from the description of the object model architecture that mentions communication by the object model. For instance, page 9, line 10 – page 10,

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line 15, which refers figure 3, detail communication between a client and server wherein the client communicates with a server by use of SNMP. The diagram is defined as a data flow diagram of the object model of the present invention. The examiner however, has several concerns relating to this description. First, the functionality is not disclosed in the claims to make the providing network management of a telecommunications network realized and as proper under M.P.E.P. 2111, the examiner cannot interpret the functionality to be part of the claim. Second, the examiner has no way of knowing how the teachings of figure 3 apply to the claimed object model architecture to suggest language to add to the claims in order to make them statutory. The figure either detail that a client, i.e. management application, can invoke the server objects of the object model to cause functionality of providing network management of a telecommunication network or that the client and server are the base objects and interfaces of the object model and are invoking each other to provide network management of a telecommunications network. The specification is not clear as to how the client and server function in relation to the object model. Therefore, clarification is necessary in order to understand the invention.

Compact Disc Submission

2. The description portion of this application contains a computer program listing consisting of more than three hundred (300) lines. In accordance with 37 CFR 1.96(c), a computer program listing of more than three hundred lines must be submitted as a computer program listing appendix on compact disc conforming to the standards set forth in 37 CFR 1.96(c)(2) and must be appropriately referenced in the specification

(see 37 CFR 1.77(b)(5)). Accordingly, applicant is required to cancel the computer program listing appearing in the specification on pages 12-34, file a computer program listing appendix on compact disc in compliance with 37 CFR 1.96(c) and insert an appropriate reference to the newly added computer program listing appendix on compact disc at the beginning of the specification.

Claim Rejections - 35 USC § 112

3. Claims 1-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, Applicant defines "a base framework action interface inherited from said base framework action container interface, said base framework interface object, framework container interface object, framework object container interface". Figs 2 and 3, both in illustration and as referenced in the specification details that the base framework action interface is inherited by said base framework action container interface, said base framework interface object, **and said base** framework container interface object. The specification makes no mention that the interface inherits said base framework object container interface. A similar rejection is made in regards to claim 14. In addition, since the drawings and specification, as well as, the beginning portions of the claim make reference to the interfaces or objects as base framework, such an identifier is necessary in all recitations of the same, i.e. said, interfaces or objects.

In claim 3, said base framework action interface and said base framework action implementation abstract object each inherit corresponding action classes (see fig. 2 and 3). The base framework action container interface does not inherit corresponding action classes.

4. Claim 19 recites the limitation "said logical port classes" in line 1. There is insufficient antecedent basis for this limitation in the claim. Claim 19 should depend from claim 17 and not claim 16.

Double Patenting

5. Applicant is advised that should claim 12 be found allowable, claim 13 will be objected to under 37 CFR 1.75 as being a substantial duplicate thereof. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1, and 4 are rejected under 35 U.S.C. 102(b) as being anticipated by FANSHIER (U.S. Patent 5,751,962).

As to claims 1 and 4, FANSHIER teaches an object model architecture for providing network management of a telecommunications network, the architecture comprising: hierarchy of base objects that inherit functionality from other objects (abstract / col. 4, line 50 – col. 6, line 12). It is inherent to teachings of FANSHIER that the object hierarchy that represents the a management network represent the interface objects, container interface object, action container interface objects, and network entity interfaces as disclosed in the claims.

Suggested Language for the Claims to be Allowable

Claim 1 (Amended). A method for providing network management of a telecommunications network, comprising:

(i) defining an object model architecture, said architecture comprising:

a base framework interface object;

a base framework container interface object;

a base framework object container interface and a base framework action container interface each being inherited from said base framework container interface object;

a base framework network entity interface inherited from said base framework object container interface; and

a base framework action interface inherited from said base framework action container interface, said base framework interface object, and said base framework container interface object,

wherein said base framework action container interface, and said base framework action interface are implemented by corresponding implementation abstract objects, and said base framework network entity interface is implemented by a base framework network entity implementation class object and said base framework action container interface and said base framework action implementation abstract object each inherit corresponding action classes;

(ii) sending a request from a client to a server for information on a network object;

(iii) the server instantiating the network object and an action class of the object model architecture to perform an action on the network object; and

(iv) returning the information to the client.

Independent claim 14, herein the computer readable medium claim, would have to have similar language as to claim 1, wherein the computer readable medium contains software code for performing the method....


Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lewis A. Bullock, Jr. whose telephone number is (571) 272-3759. The examiner can normally be reached on Monday-Friday, 8:30 - 5:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng An can be reached on (571) 272-3756. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

August 30, 2005


LEWIS A. BULLOCK, JR.
PRIMARY EXAMINER